

(REVIEW ARTICLE)



## Severe anaemia in a young man due to frequent blood donation for sale/money: A common occurrence locally in most privately owned laboratories

Mabiaku TO <sup>1,\*</sup>, Mabiaku YO <sup>2</sup>, Yovwin DG <sup>1</sup> and Anyanwu EB <sup>1</sup>

<sup>1</sup> Department of Family Medicine, Delta State University Teaching Hospital, P.M.B. 07, Oghara, Nigeria.

<sup>2</sup> Department of Surgery, Delta State University Teaching Hospital, P.M.B. 07, Oghara, Nigeria.

International Journal of Biological and Pharmaceutical Sciences Archive, 2022, 04(01), 018–020

Publication history: Received on 14 March 2022; revised on 26 April 2022; accepted on 28 April 2022

Article DOI: <https://doi.org/10.53771/ijbpsa.2022.4.1.0043>

### Abstract

Blood donation is globally encouraged from the public for the use of ill patients who might need blood transfusion. Many laboratories do urge people to donate blood willingly. The donors are usually checked properly and are screened for some notable blood borne diseases and the blood level of these potential donors is checked to ensure that the donor is capable of donating blood. For regular donors, the last dates that they donated are checked just to be sure that the interval is not too close. But what happens when the donor is a “commercial donor” who donates blood for monetary gains and usually gets the protocol broken for him. The planned periodic interval between donations is usually not followed and he is allowed to donate. He is paid off, and the blood bank then sells these blood for monetary gains. He goes from one laboratory to another and is allowed to donate blood for money. This went on until one day he presented to a hospital with a complain of a tingling/ ringing sensation in his head and laboratory findings revealed that he was Anaemic apparently from the unsupervised frequent blood donations. And only then did he tell his story.

**Keywords:** Blood Donations; Anaemia; Blood for money; Laboratories

### 1. Introduction

Most hospitals and commercial private laboratories depend on the general public to donate blood willingly. In some cases, they encounter people who will demand for money before they donate their blood. These are the so called commercial blood donors and the number of such people is supposedly increasing everyday possibly due to the harsh economy.

In other cases, patient who may need blood transfusion gets his relatives to donate blood for him. These are usually first time donors. They are safe and will not develop anaemia from their one-time donations.

This is contrary to the commercial blood donor who sells his blood for money. He donates blood as frequently as he can for the money that will be paid to him.

So, he moves from one laboratory to another to avoid recognition. He usually may not get properly screened and therefore can be a possible source for transmission of blood borne diseases.

He may also develop iron deficiency anaemia resulting because of the frequent donation with little time for the body and bone marrows to recover.

\* Corresponding author: Mabiaku TO

Department of Family Medicine, Delta State University Teaching Hospital, P.M.B. 07, Oghara, Nigeria.

This was the case of the index case who presented at a popular outpatient clinic of privately owned hospital in the Niger Delta region of Nigeria. He was complaining of tingling and ringing in his head.

A thorough examination of all his systems was essentially normal but investigations revealed a low packed cell volume of 18%. Normal stool analysis, no ova nor parasites found in his stool, HbsAg, Hbc, VDRL and HIV I & II were all negative. The only abnormality found was a low PCV (18%).

On questioning him, he voluntarily confessed that he is a serial blood donor that he does not smoke nor drink alcohol and that he had enjoyed a steady good health over the years. He denied any history of past hospital admissions and never had any surgeries.

The only finding was that he was pale and upon investigations, he was found to have a low PCV.

---

## 2. Discussion

Blood for transfusion is an essential commodity. It is needed for all patients of every specialty if the need arises for that patient. Blood donors must therefore be certified clinically fit and properly screened before they can be allowed to donate. Commercial blood donors are usually paid by the blood bank for re-sale to patients, and the argument arises about its morality and ethical challenges [1, 2].

Then donors as well as all other donors need to have their blood tested for hepatitis B, and C, HIV and Syphilis, and their packed cell volumes must also be determined. [3, 4]

Several other criteria and important guidelines should be met for the selection of blood donors.

- The health and safety of both the donors and the recipient of the donated blood must be safeguarded.
- Only donors in good health should be allowed to donate
- The status of the donor's health and medical history must be stringently reviewed before donation.
- Only appropriate trained staff can be allowed to bleed donors.
- Proper communication before donor and staff should be established and strictly confidentiality be assured.
- Proper advice and appropriate counseling and management for any declined donors whose request for donation was rejected.
- All efforts must be made to obtain a signed informed constant form from all donors.

The World Health Organization recommend that the frequency of blood donation may not be greater than once (one time) in every two months, even though globally, most donation happens between 8 weeks and 16 weeks [3]. Any increase in frequency can lead to donation induced iron deficiency anaemia [3] Commercial blood donors especially if not properly screened can lead to the spread of several infections disease and it is reported that as much as 10% of all transfusion in Nigeria may not be safe [5] Subsequently, blood donation is advised to be a voluntary activity, not for money generating purpose [6, 7]. It is globally accepted that men can donate blood voluntarily for about every three months and women can donate blood every four months without any ill effect to them [8].

---

## 3. Conclusion

In conclusion, blood donation is a frequent occurrence that helps in preventing morbidities and mortalities globally. It is therefore important that all the necessary precautions be take to ensure the safety of all blood donors so that they will not be taken advantage of. We call on the government and stakeholders to ensure that measures are put in place to forestall such a similar occurrence.

---

## Compliance with ethical standards

### *Acknowledgments*

The entire staff of Harvard Specialist Hospital Warri, Delta State, Nigeria are acknowledged for their support in the laboratory investigation of this case.

*Disclosure of conflict of interest*

The Authors have no conflict of interest.

---

**References**

- [1] Elizabeth Preston. Why you get paid to donate plasma but not blood. STAT. 2016.
- [2] Hartwig Von Schubert. Donated blood-gift or commodity? Some economic and ethical consideration on voluntary versus commercial donation of blood. Social science and medicine. July 1994; 39(2): 201-206.
- [3] Christopher Ogar Ogar, Dorathy Chioma Okpokjam, Henshaw Uchechi Okoroiwu, Ifeyinwa Maryann Okafor. Comparative Analysis of hematological parameters of first-time and repeated blood donors: Experience of a blood bank in Southern Nigeria.
- [4] World Health Organization. Blood donor selection: Guidelines on assessing donor suitability for blood donation. 2012.
- [5] Angela Onwuzoo. Commercial blood donors high risk for spreading viral, infectious disease. Punch Health Wise. Healthwise. 2021.
- [6] Lara Adegoro. Nigeria needs to reduce commercial blood donors, encourage voluntary blood donation. Punch Health Wise. 2021.
- [7] Benedict Nwogoh OD, Ikponwen EM, Isao. Donor Blood procurement and the risk of transfusion transmittable viral infections in a tertiary health facility in South-south Nigeria. Nigeria Medical Journal. 2011; 52(4): 227-229.
- [8] World Health Organization. Safe blood and blood products.